

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
7 July 2005 (07.07.2005)

PCT

(10) International Publication Number
WO 2005/061019 A3

(51) International Patent Classification⁷: **A61L 27/38**,
27/44, C12N 5/06

(21) International Application Number:
PCT/US2004/041179

(22) International Filing Date:
10 December 2004 (10.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/528,064 10 December 2003 (10.12.2003) US
PCT/US2004/032934
7 October 2004 (07.10.2004) US
PCT/US2004/033194
8 October 2004 (08.10.2004) US

(71) Applicant (for all designated States except US): **CELLULAR BIOENGINEERING, INC. (CBI)** [US/US]; 1946 Young Street, Suite 480, Honolulu, HI 96826 (US).

(71) Applicant and

(72) Inventor: **WUH, Hank, C., K.** [US/US]; 250 Kawaihae Street #19D, Honolulu, HI 96825 (US).

(74) Agent: **CONTRERA, Joseph, G.**; Jacobson Holman PLLC, 400 Seventh Street, N.W., Suite 600, Washington, DC 20004 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

(88) Date of publication of the international search report:
22 September 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHODS AND COMPOSITION FOR SOFT TISSUE FEATURE RECONSTRUCTION

(57) Abstract: This present invention describes methods and compositions useful for the reconstruction of various soft tissue features such as lips, areola, and many other features by taking a mold of the skin feature to be replaced, such as the areola, prior to surgical resection, re-creating the size and shape of the soft tissue feature, for example, the nipple and areola, and making a polymer or biopolymer scaffold that is biocompatible, has the ability to allow the epithelization of the skin cells over the polymer, the capability of cell integration into the body of the scaffold, as well as the capability of infiltration of surrounding nerve fibers into the substance of the scaffold, so that the patient may have the benefit of a reconstructed soft tissues feature that not only has the same size and shape and appearance as the native tissue, but also has functional sensation.



WO 2005/061019 A3